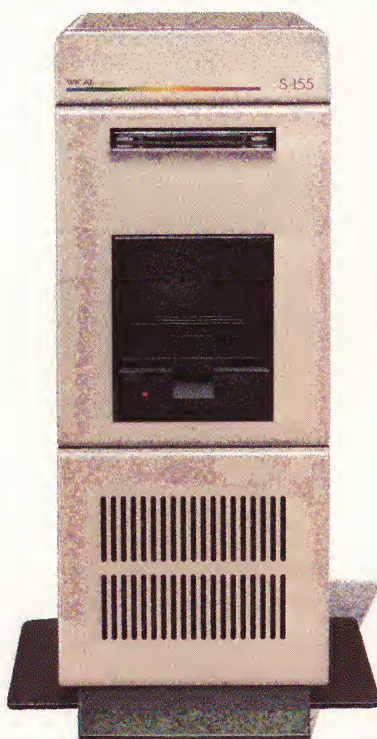


System 155



WICATsystems

WICAT SYSTEM 155

The System 155, an expanded version of WICAT's popular System 150, is the ideal computer for businesses that support multi-user environments, require large main memory capacity, and want to be prepared for system expansion.

The system's MC68000 microprocessor executes approximately one million instructions per second, and memory capacities range from 512 Kbytes to 4.5 Mbytes of dynamic ECC RAM. A maximum of two 5¼-inch (10-39 Mbyte) Winchester disks provide mass storage, while a cartridge-tape drive allows for even greater capacity.

The trim vertical package is an attractive addition to any office environment, and the combination of high performance and low cost makes the System 155 the answer to a business' computer needs.

PROCESSOR

- MC68000L8, 8 Mhz (approx. 1 million instructions per second)
- 16-bit processor (32-bit data operation)
- Memory Management
- 7 vectored interrupt levels
- 12-slot chassis (IEEE 796, extended Multibus*)

MEMORY

- 512 Kbytes to 4.5 Mbytes of dynamic ECC RAM

PERIPHERALS

- 10-39 Mbyte Winchester Disk Subsystem
- ¼" Cartridge Tape Subsystem (6400 bpi, 30/90 ips)
- Interfaces:
 - 1-16 RS-232 C serial ports
 - 1-2 parallel printer ports
 - Battery-operated floating point (optional)
- Hardware floating point (optional)

SYSTEM SOFTWARE

- Communications: 3275 emulation (Bisync.), 2780/3780 emulation (Bisync.)
- Multi-user Control System (MCS): A real-time, multi-user, multi-tasking operating system
- Operating System Options: UniPlus+* (UNIX*), CP/M Emulator*
- Language Support: APL.68000*, Assembler, W-BASIC, SMC-BASIC, C, RM-COBOL, LEVEL II COBOL, FORTRAN 77, and PASCAL
- Major Applications: Office Information System (word processing), UltraCalc, WISE (courseware development system), and Sequitur* (relational DBMS).

P.O. Box 539 1875 South State Orem, UT 84058 (801) 224-6400
20 North Wacker Drive Suite 1642 Chicago, IL 60606 (312) 630-0010

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6th East 43rd Street 9th Floor New York, NY 10017 (212) 682-4180
13160 Mindanao Marino Del Ray, CA 90292 (213) 827-8182

System 155 Hardware Specifications

DIMENSIONS

Height	25 5/8 in.
Width	10 5/16 in.
Depth	23 5/8 in.

ENVIRONMENTAL AND SAFETY

Safety

Designed to meet UL 478 (EDP) and 114 (office equipment), and CSA 154 (EDP) and 143 (office equipment) requirements.

RFI/EMI

Complies with FCC Rules and Regulations, Part 15, Subpart J, Class A.

Temperature

Operating	50 to 95°F.	10 to 35°C.
Idle	-40 to 140°F.	-40 to 60°C.

Operating Altitude

10,000 ft. or 3,000 m.

Operating humidity

(noncondensing) 20 to 80%

ELECTRICAL

Power requirements

Frequency	47-440 Hz
Voltage	95-130/190-260 VAC
Watts	400

Timing

CPU	8 MHz
Bus	IEEE 796 (Multibus*)
RS-232 C serial ports	50-19200 Baud
Parallel	200 Kbytes/sec.

MTBF

4000 hours

5 1/4" (10-39 Mbyte) WINCHESTER DISK SUBSYSTEM

Access time

Track to track	2-6 ms.
Average	33-87 ms.
Maximum	73-175 ms.
Transfer rate	625 Kbytes/sec.
Rotation rate	3600 rpm

CARTRIDGE TAPE

Capacity:

Length of Tape	Block Size		
	1024 bytes	2048 bytes	4096 bytes
300 ft.	5.6 MB	7.2 MB	8.5 MB
400 ft.	8.4 MB	10.8 MB	12.7 MB

Access time

Recording density	6400 bpi
Tape speed	30/90 ips
Transfer rate	192 Kbits/sec

System Software

OPERATING SYSTEMS

The Multi-user Control System (MCS)

Users have simultaneous access to the system (multi-user), and each user can run several processes simultaneously (multi-tasking).

Command files and parameter files that contain lists of commands (script) or parameters can be executed as though the operator were typing them.

Logical Input/Output.

Input/Output redirection.

Named pipes.

75 standard utilities including a screen-oriented text editor, SORT/MERGE, incremental system backup.

Subdirectories (hierarchical) to any level.

File versions.

Logical names.

A variety of user interface programs. The standard interface is expandable and includes command line editing, prompted parameter entry, on-line helps, and parameter.

Keyed Sequential Access Method (KSAM).

Memory management also allows the following:

Processes can share pages of memory1.

Pages of logically addressed memory can be write-protected.

All user processes share a uniform context.

Noncontiguous physical memory pages appear as contiguous logical memory pages (within a 2MB limit).

User processes are isolated from each other as well as from the MCS.

The text, or code, segment of a process being used simultaneously by several users is write-protected and shared automatically.

WICAT UniPlus+

WICAT's UniPlus+ system derives from the UNIX* operating system and combines a complete set of basic utilities with a set of powerful mechanisms that allow the user to create new commands. The UNIX system is self-contained and therefore adaptable to numerous new processors and hardware systems.

WICAT has source licenses with AT&T for UNIX Version 7 and UNIX System III. The kernel and utilities for WICAT's UniPlus+ are essentially those of UNIX Version 7 from Bell Laboratories. In addition to enhancements made by WICAT Systems, UniPlus+ includes the enhancements of UNIX System III, and the 4.1 Berkeley Standard Distribution.

Utilities and subsystems include:

C Shell	(command processing language)
vi	(visual display editor)
SCCS	(Source Code Control System)
curse	(screen management library)
nroff, tbl	(document preparation)
yacc, lex	(language development)
uucp, cu	(UNIX networking)
badblk	(handling bad blocks)
mt	(Berkeley mag tape)

APPLICATIONS

Office Information System (OIS) Word Processing

This flexible word processing system, with editing and formatting capabilities, includes pagination, search and replace, automatic page numbering, cut and paste, right justification, a spelling dictionary, and other essential functions.

UltraCalc

UltraCalc, a versatile electronic worksheet, allows you to manipulate and analyze tabular data using graphs, automatic recalculations, 15-digit arithmetic, and advanced math functions. These features simplify economic forecasting, trend analysis, and other computations.

WISE

WISE is a courseware development system that allows the nonprogrammer to use text and graphics editors as well as instructional design features to create sophisticated instructional programs. WISE eliminates the need for an intermediary programmer to develop computer-operated lessons on any subject.

SEQUITUR

This relational database management and word processing system is totally screen-oriented and offers fully integrated editing and relational data manipulation. Sequitur also provides unprecedented versatility for entering data; generating reports, forms, and mailing lists; and using word processing to manage documents.

LANGUAGES

Assembler

The WICAT 68000 Assembler processes files at 2000 lines per minute. It supports the standard mnemonics and pseudo-instructions in Motorola's portable cross assembler to transport applications quickly and effectively.

APL.68000

APL.68000 is the first APL interpreter for the MC68000 microprocessor. It supports a powerful file system, formatter, and IEEE floating point arithmetic.

C

The WICAT C compiler derives from the standard UNIX* C compiler and comes with full standard I/O and math libraries. This low-level language allows easy access to the operating system and hardware, as well as to FORTRAN and Assembler.

FORTRAN77

FORTRAN77 is a GSA-validated, full implementation of the ISO standard. FORTRAN77 has an enhanced I/O and program structure and still supports the FORTRAN 66 standard.

PASCAL

WICAT's PASCAL compiler produces an optimized native 68000 code. Extensions to the ISO standard include random file access, UCSD-compatible strings, and liberal-set capability.

W-BASIC

W-BASIC is WICAT's new enhanced BASIC programming language. It is fully Microsoft compatible and complies with the ANSI standard for BASIC. Availability for both MCS and UNIX operating systems gives W-BASIC ease of use and broad application for both scientific and educational use.

SMC-BASIC

SMC-BASIC is a Business Basic that retains the simplicity of the original Dartmouth BASIC, yet includes enhancements that make the language particularly simple and easy to use for business applications.

RM-COBOL

RM-COBOL is an implementation of the ANSI 74 COBOL standard, designed for the efficient development and execution of COBOL business applications. RM-COBOL has the features commonly required by minicomputer and mainframe applications.

LEVEL II COBOL

WICAT is the first to offer this GSA certified high-level COBOL compiler for use on microcomputers. The compiler offers the user a broad range of COBOL business applications at the highest possible level. An optional native code generator allows greatly increased speed and efficiency of execution.

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*CP/M is a trademark of Digital Research.

*UniPlus+ is a product of Unisoft.

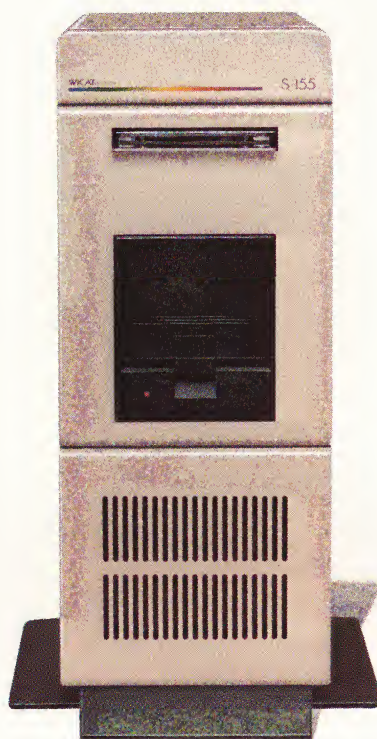
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